

REMARKS

By this amendment, claims 1, 5, 11, and 19 are revised, new claim 22 is added, and claims 2 and 15 are canceled to place this application in immediate condition for allowance. Currently, claims 1, 3-14, and 17-22 are before the Examiner for consideration on their merits.

No new matter is introduced by the revisions to claim 1. The changes can be found in claims 2 and 15, and the specification, page 3, line 31 to page 4, line 2, page 4, line 2 to line 4, Figures 1-8, and original claim 16.

Turning now to the Office Action, the rejection based on 35 U.S.C. § 101 is now moot since reference to the macula is no longer present in the claims.

For the indefiniteness rejection, claim 2 is canceled so the objection related to this claim is now moot. The objectionable language in claims 9 and 13 is removed so that this issue is now moot. Claim 5 is revised so that the coating and chamber fluid have antecedent basis. Claim 22 is added to cover the alternative expressed in original claim 5. In light of these amendments, the claims are fully definite under 35 U.S.C. § 112, second paragraph and the rejection based on this statutory provision should be withdrawn.

The claim amendments bring out the features of the invention and clearly overcome the rejections of record.

The invention is one that provides a lens device which is characterized by a very small size and is able to improve the vision of a person affected by a vision problem such as macula degeneration. The invention is able to do this by the following:

- i) the focal point is redirected through the wedge-shaped recesses;
- ii) the wedge-shaped recesses are characterized by inclined areas, which cause the redirection of the focal point;
- iii) the inclined areas are plane areas aligned in parallel to each other along the whole area of the lens device; and
- iv) the lens device features on one side several wedge-shaped recesses and on the other side a superposition of spherical and non-spherical segments of one of the several Fresnel lenses.

The advantage of the invention are the wedge-shaped recesses, which are characterized by the inclined areas, aligned in parallel to each other along the whole area of the lens device. This particular technical feature makes it possible to redirect the focal point generated by the lens device in a lateral manner from an impaired macula area to a healthy area.

Another advantage of the invention is that the wedge-shaped recesses are located on one side of the device, while the Fresnel lens segments are located on the opposing part of the device. Therefore, the lens device can be very thin and small.

As will be demonstrated below, the features of the invention as now found in amended claim 1 are not taught or suggested in the primary reference or secondary references and the rejection should be withdrawn based on this submission.

Turning now to the prior art rejection, the incorporation of the limitations of claim 15 moots the rejection based on United States Patent No. 6,835,204 to Stork under 35 U.S.C. § 102(b). In rejecting claim 15, the Examiner alleges that it would be

obvious to modify the lens of Stokes given the teachings of United States Patent No. 4,828,558 to Kelman.

Regardless of the teachings of Kelman, Stork no longer establishes a *prima facie* case of anticipation against claim 1, as amended. Stork discloses a lens for the treatment of visual impairments, see col. 1, lines 8 and 9. This device features at least one convex lens segment, see col. 2, line 26+. The convex lens elements are designed as a segment of a Fresnel lens, see col. 3, lines 39-43. While not expressly stated, the lens device of Stork, it must includes a "fixation element for fixing in the eye" (clause b of claim 1) and a feature wherein a "focal point is generated by one or more several convex parts of the lens device", clause g of claim 1.

The reason that Stork cannot anticipate claim 1 is that the features of clauses (d), (h), (i), (j), and (k) are missing.

In the rejection, the Examiner has asserted that the claimed wedge-shaped recesses are present in Stork, identifying them in the Detailed Action as reference numeral 3. The recesses 3 relied upon by the Examiner are, in fact, annular, concentric structures. This can be seen from Stork in col. 2, line 28, wherein it is stated "a lens area 3 arranged in annular form". Col 1, lines 28-29 and col. 3, lines 39-43 further state "For forming a bifocal lens, an additional diffractive fine structure is provided on the optical lens part 1. This fine structure is preferably formed as a diffractive Fresnel pattern and has the form of annular fine structure elements 7 in saw tooth shape".

In contrast to the annular and concentric structure of Stork, the invention is characterized by plane inclined areas A, which are aligned in parallel to each other, and

have a three dimensional structure of real wedges as shown in the attached drawing. Figures 2 and 5 of the application also illustrate the plane inclined areas A, see also the annotated Figures in the attachment.

Figure 2 of the attachment shows a cross section of the lens device, with several wedge-shaped recesses, 34 and 36, on the rear side, whereby the wedge-shaped recesses are characterized by inclined areas (A1, A2), which can cause the redirection of the focal point from position 46 to position 46'.

Clauses (h), (i), and (j) all recited the features described above. It can be clearly recognized from the claim language and attached Figure 2 that the annular structure areas A1 and A2 can not be interpreted to be the same as the wedge-shaped recesses as they are now defined in claim 1, particularly given clause (j) of claim 1; they are oriented in the same direction, which is not the case at all for the annular structure of Stork.

Furthermore, it can be clearly understood that only this non-annular alignment of the inclined areas makes it possible to redirect the focal point 46 in the desired lateral manner, see clause (h) of claim 1. It is this technical feature of the invention that provides a lens device which is able to redirect the focal point from an area with an impaired retinal function to an area capable of functioning as disclosed on page 13, line 31+ of the specification.

This same feature is illustrated in Figure 5 of the attachment. This Figure shows several wedge-shaped recesses 32 on the one side of the lens. The wedge-shaped recesses 32 are characterized by inclined areas A1 and A2, which redirect the focal

point. It is clear that the recesses 32 cannot be considered to be the same as the annular structure of Stork.

Based on the above, Applicants submit that Stork cannot establish a *prima facie* case of anticipation since all of the features of claim 1, as amended, are present.

Stork also fails to teach the limitation of (k) wherein the wedge-shaped recesses are on one side and the other side includes the superposition of the spherical and non-spherical segments.

Since Stork does not anticipate claim 1, the question remains as to whether the other prior art can supply the deficiencies in Stork such that the Examiner could establish a *prima facie* case of obviousness. This question is answered in the negative since the secondary references do not teach the missing aspects of Stork and even if combined with Stork, the invention would still not exist. The secondary references are addressed below under the respective headings.

United States Patent No. 5,712,721 to Large

Large does not disclose the features found in clauses (h), (i), and (j), i.e., that the focal point is redirected through the wedge-shaped recesses, which are characterized by inclined areas being aligned in parallel to each other along the whole area of the lens device. Lacking these features, even if Large were used to modify Stork so as to include the coating of Large in Stork's lens device, the lens device of claim 1 would still not exist.

United States Patent No. 6,244,707 to Faubl et al. (Faubl)

Faubl is used to modify Stork with a UV protection film. However, Faubl does not teach the missing features of Stork as explained above. Therefore, even if the teachings of Faubl were combined with Stork, the lens device of claim 1 would still not be produced and a *prima facie* case of obviousness is not established.

United States Patent No. 4,828,558 to Kelman

The Examiner uses Kelman to allege that it would be obvious to make the lens of Stork in a foldable manner. Nevertheless, Kelman does not teach the features of claim 1 missing from Kelman. In fact, Kelman is similar to the annular structure of Stork so is just as removed from the invention as Stork. More particularly, Kelman uses exclusively annular structures as can be read in col. 4, lines 21-27, i.e., "The Fresnel element (5) defines the interior surface (7) ... as a discontinuous surface formation, which includes a concentric series of annular prisms (9), composed of annular refraction... ". Therefore, Kelman cannot make up for the failings of Stork and even if combined therewith, a *prima facie* case of obviousness cannot exist.

United States Patent No. 4,673,406 to Schiegel

Schiegel is cited in the accompanying IDS. This patent does not teach the features of clauses (h), (i), and (j). Therefore, this reference, even if combined with Stork cannot establish a *prima facie* case of obviousness.

Obviousness

Applicants also assert that there is no basis to allege obviousness based on Stork alone or a modification of the other prior art to arrive at the invention.

Stork does provide a lens device for the treatment of visual impairment. However, it is not possible to redirect the focal point of Stork's lens device from an area with impaired retinal function to an area that is capable of functioning; Stork cannot cure the problem of macula degeneration as does the invention.

Schiegel also is incapable of the redirection of the focal point so that the invention cannot be derived from this reference.

There is no motivation to modify any of the other references in such a manner that a *prima facie* case of obviousness would exist. Therefore, the rejection of claim 1 is no longer valid and must be withdrawn.

Since the rejection of claim 1 is no longer valid, the rejections as applied to the dependent claims should also be withdrawn.

Accordingly, the Examiner is requested to examine this application in light of this response and pass all pending claims onto issuance.

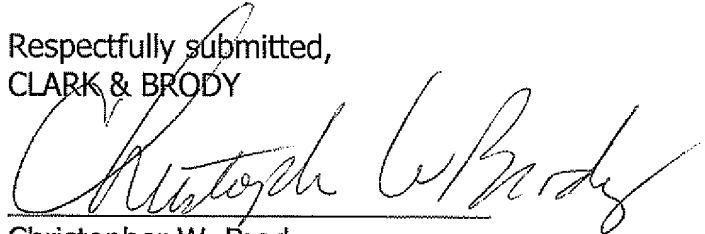
If the Examiner believes that an interview would be helpful in expediting the allowance of this application, the Examiner is requested to telephone the undersigned at 202-835-1753.

The above constitutes a complete response to all issues raised in the Office Action dated May 12, 2009.

Again, reconsideration and allowance of this application is respectfully requested.

Applicants petition for a three month extension of time. Please charge Deposit Account No. 50-1088 the petition fee of \$555.00 to cover the cost of the petition. Please charge any fee deficiency or credit any overpayment to Deposit Account No. 50-1088.

Respectfully submitted,
CLARK & BRODY

A handwritten signature in dark ink, appearing to read "Christopher W. Brody", is written over a horizontal line.

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Attachment to Amendment filed November 10, 2009
U.S. Patent Application No. 10/576,326
1 page

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